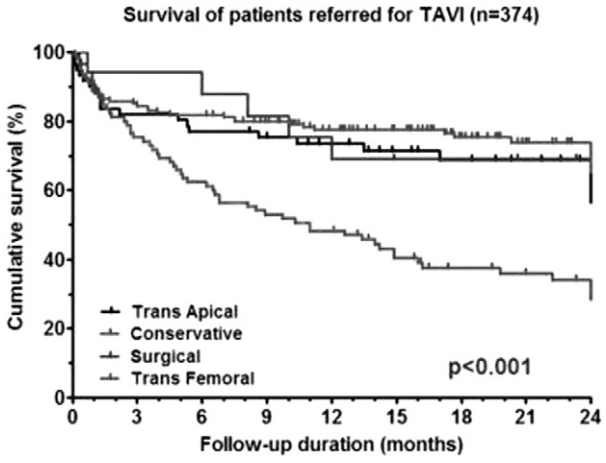
Conclusions: VinV –TAVI is widely performed, albeit in small numbers, in majority of centers in the Nordic countries. The short-term results are excellent on this high-risk patient population, demonstrating a low incidence of procedure-related complications. However, a number of patients are left with suboptimal systolic valve performance with unknown long-term effects, warranting a close surveillance after VinV-TAVI.

TCT-851

Patients Referred For Transcatheter Aortic Valve Implantation: Reasons For Rejection And Survival In A Real World Population

Kirsten Boerlage-van Dijk[1], Esther Wiegerinck[1], Rianne Schoo[1], Karel Koch[1], Marije Vis[1], Ricardo Cocchieri[1], Bas A.J.M. De Mol[1], Jan Piek[1], Jan Baan[1]
[1]Academic Medical Center - University of Amsterdam, Amsterdam, Netherlands

Background: The last few years, transcatheter aortic valve implantation (TAVI) has evolved as a good alternative treatment for patients rejected or with high risk for aortic valve replacement (AVR). Very few studies report reasons for rejection for TAVI and the outcome of these rejected patients. The purpose of this study is to investigate the reasons for rejection for TAVI and compare survival between rejected and treated patients.
Methods: In this retrospective single center study patients referred for TAVI between October 2007 and September 2011 are included. Reasons for rejection for TAVI were collected and survival was compared for conservative treatment with transfemoral or transapical TAVI and surgical AVR.
Results: We included 374 patients(mean age 81 years, 49% male); 150 patients were rejected for TAVI. Reasons for rejection were: multiple comorbidities (24%), surgical candidate (14%), other heart disorders (poor left ventricular function and/or other valve abnormalities) (10%), asymptomatic or no severe aortic stenosis (7%), poor renal function, malignancy, severely impaired lung function, cognitive reasons, poor peripheral vessels and extreme high age. A total of 160 patients were treated by transfemoral TAVI and 64 patients by transapical TAVI. Patients treated by TAVI or surgically had a significant better 2-year survival than patients treated conservatively.



Conclusions: There are many reasons for rejection for TAVI, but the main reason was multiple comorbidities. Patients with symptomatic severe aortic valve stenosis treated by TAVI or surgical have a better survival than patients treated conservative.

TCT-852

Successful Transfemoral Implantation of a Medtronic CoreValve in Patients with Severe Aortic Regurgitation: a Single Centre Experience

Marco Luciano Rossi[1], Roberto Bocchi[1], Paolo Pagnotta[1], Gabriele Gasparini[1], Dennis Zavalloni[1], Patrizia Presbitero[1]
[1]Istituto Clinico Humanitas, Rozzano, Milano, Italy

Background: Severe aortic regurgitation (AR), when intervention is required, is managed by surgical aortic valve replacement (SAVR). TAVR could be a valid "off label" option to treat severe AR for patients unsuitable for SAVR due to their high surgical risk. However, in severe AR, large aortic annulus and poor aortic valve calcifications made challenging TAVR. We hereby report our single centre experience of 8 cases (see Table) of AR in which surgical correction was excluded because of high predicted operative mortality. These cases were treated with TAVR using Medtronic CoreValve prostesis.

Total of patients	8
Age y (mean)	81
NYHA class III-IV pre TAVR %	100
L-Euroscore %	31
2 valve requirement (valve-in-valve)	0%
Ao regurgitation post TAVR > 2	20%
New permanent PM implantation %	40
6 month mortality	none

Methods: In all cases an oversizing prosthesis was used. Pre-dilation with balloon valvuloplasty was never performed. During valve deployment a rapid (180 bpm) pacing was used in order to prevent valve ejection.
Results: In our patients there were no peri-procedural major complications (stroke, major bleeding). A new permanent PM implantation was necessary in 3 pts. At the 30-days and 6-month follow up we observed an improved functional capacity and no death.
Conclusions: TAVR in AR remains an off-label application needing further study. However in selected cases may be considered as a valid option to treat severe AR in patients unsuitable for SAVR.

TCT-853

Procedural results of direct implantation of the selfexpanding CoreValve aortic bioprosthesis without prior valvuloplasty

Emmanuel Chorianopoulos[1], Sven Pleger[1], Ulrike Krumsdorf[1], Hugo Katus[2], Raffi Bekeredjian[1]
[1]Heidelberg University Hospital, Heidelberg, Germany, [2]University of Heidelberg, Heidelberg, Germany

Background: TAVR has become a standard therapy for patients with severe aortic stenosis considered to be inoperable or at very high risk for surgery. For both types of currently available prostheses (the selfexpanding CoreValve (Medtronic, Minneapolis, MN) and the ballon-expandable Edwards–Sapien XT (Edwards Lifesciences, Irvine, CA)) the standard procedure includes a balloon predilation as part of the procedure before implanting the actual device. Although predilation of the calcified valve may facilitate device placement, it bears a risk of stroke and conduction disturbances, two major drawbacks of this procedure.
Methods: We performed a prospective study in 74 consecutive patients to investigate the feasibility and procedural results of direct implantation of the selfexpanding Medtronic CoreValve prosthesis without predilation.
Results: A total of 74 consecutive patients implanted with a CoreValve aortic bioprosthesis were included in our study. Successful implantation was achieved in 73 (98.6%) of the patients. Postdilation was necessary in 27% of the cases. Evaluation of outcome after 30 days showed a stroke/TIA rate of 2.7% with a 1.3% rate of major stroke. At 30 days need for permanent pacemaker insertion post TAVR was 21.7% and overall mortality was 4.1 %. Procedural results showed an average implantation depth of 5.9±3.2 mm below the annulus line and a rate of postprocedural aortic regurgitation ≥ grade 2 of 1.4%.
Conclusions: Direct implantation of the CoreValve selfexpanding aortic bioprosthesis without predilation is feasible and may be a safe alternative to the standard procedure using predilation. Procedural results showed a low number of strokes and need for postinterventional pacemaker implantation. Prospective studies should be performed to compare both techniques of implantation with respect to periprocedural stroke rates and need for pacemaker implantation.

TCT-854

Prognostic value of preinterventional troponin T levels in patients with severe aortic stenosis undergoing TAVR

Emmanuel Chorianopoulos[1], Ulrike Krumsdorf[1], Sven Pleger[1], Nicolas Geis[1], Evangelos Giannitsis[1], Hugo Katus[2], Raffi Bekeredjian[1]
[1]Heidelberg University Hospital, Heidelberg, Germany, [2]University of Heidelberg, Heidelberg, Germany

Background: Elevated concentrations of troponin T (cTnT) have prognostic impact in patients with aortic stenosis. For patients with high risk for conventional aortic valve replacement, transcatheter aortic valve replacement (TAVR) has become an established therapeutic option.
Methods: We conducted a retrospective analysis in 201 consecutive patients scheduled for transfemoral TAVR and analyzed predictors, kinetics and prognostic values of pre- and postinterventional troponin T levels by using a high sensitive troponin T assay (Roche Diagnostics).
Results: Patients with severe aortic stenosis had significantly elevated levels of cTnT detectable before TAVR. Postinterventional cTnT levels rose significantly about seven fold after transfemoral TAVR. Cardiac cTnT levels were highest at day 3 after TAVR (204 ± 11 pg/ml (mean ± SEM) compared to 43 ± 3.1 pg/ml before TAVR) and steadily declined thereafter. Baseline renal function (p=0.011), the duration of intraprocedural rapid pacing (P=0.0012) left ventricular mass (p=0.01) and baseline cTnT (p=0.0001) values were related to postinterventional cTnT release. Interestingly, Kaplan-Meier survival curve analysis revealed, that although cTnT levels were not predictive for shortterm mortality, preinterventional as well as postinterventional peak cTnT showed

POSTERS